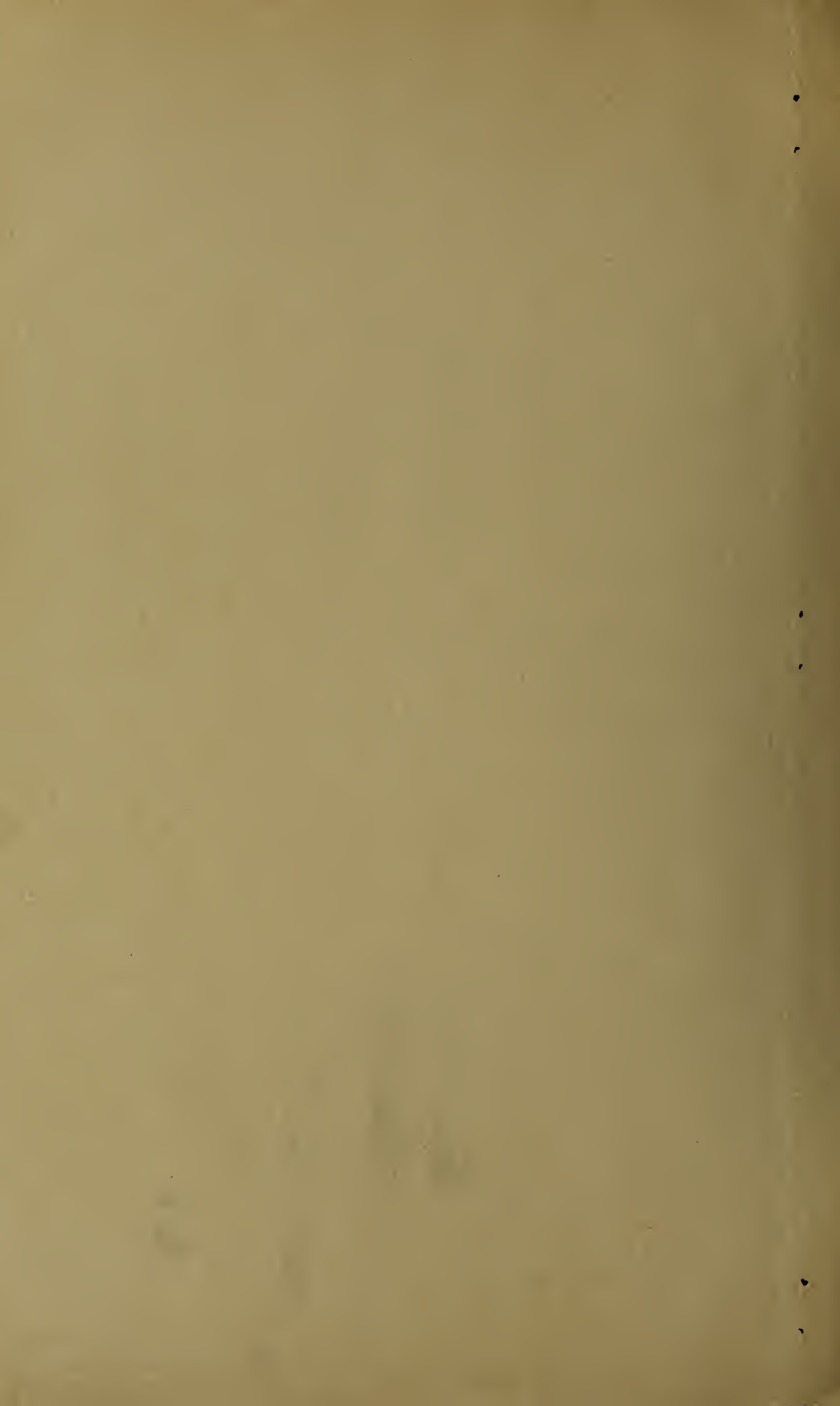


1956

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**BOROUGH
OF
CHIPPENHAM**

1956



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C H I P P E N H A M

THE

ANNUAL

REPORT

of the

M E D I C A L O F F I C E R O F H E A L T H

and

S E N I O R P U B L I C H E A L T H I N S P E C T O R

for the

YEAR ENDING 31st. DECEMBER

- 1 9 5 6 -

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PUBLIC HEALTH OFFICERS OF THE AUTHORITY ETC.

(a) MEDICAL OFFICER OF HEALTH.

C.L. Broomhead, M.D., B.Ch., D.P.H.

Also Medical Officer of Health for the Boroughs of Calne & Malmesbury and the Rural Districts of Calne & Chippenham and Malmesbury.

(b) SENIOR PUBLIC HEALTH INSPECTOR.

S.F. French, Sanitary Inspector's Cert. R.S.I.
Meat & Other Foods Inspector's Cert. R.S.I.

(c) ADDITIONAL PUBLIC HEALTH INSPECTOR.

R.P. Pengelly, Sanitary Inspector's Cert. R.S.I.
Meat & Other Foods Inspector's Cert. R.S.I.
(to 22.9.56)
C.W. Pitman, Cert. S.I.B., Meat & Other Foods Cert. R.S.I.
(from 12.11.56)

(d) CLERK TO THE MEDICAL OFFICER OF HEALTH.

S.G.V. Williamson, Cert. R.I.P.H.H.

(e) The Committee of the Borough Council dealing directly with Public Health matters is:-

The Public Health & Highways Committee.



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Mr. Mayor, Ladies and Gentlemen,

I have the honour to present my Annual Report for the year ended 31st. December, 1956.

General and Vital Statistics, i.e. Population, Birth and Death Rates etc. are shown on pages 7 with appropriate comments.

Little infectious disease occurred during 1956; no notifications of Poliomyelitis or Diphtheria were received.

There has been a sharp increase in the number of deaths from Lung Cancer, i.e. fifteen deaths compared with three during 1955. Comments on Cancer will be found in subsequent pages.

Intensive investigations into the bacteriological content of the Council's water undertakings made during the year were the subject of a report to the Public Health & Highways Committee.

Although the Council is concerned principally with environmental health as distinct from the personal health services of the County Council, a report on Public Health necessitates comment on all aspects of the National Health Service.

General Public Health.

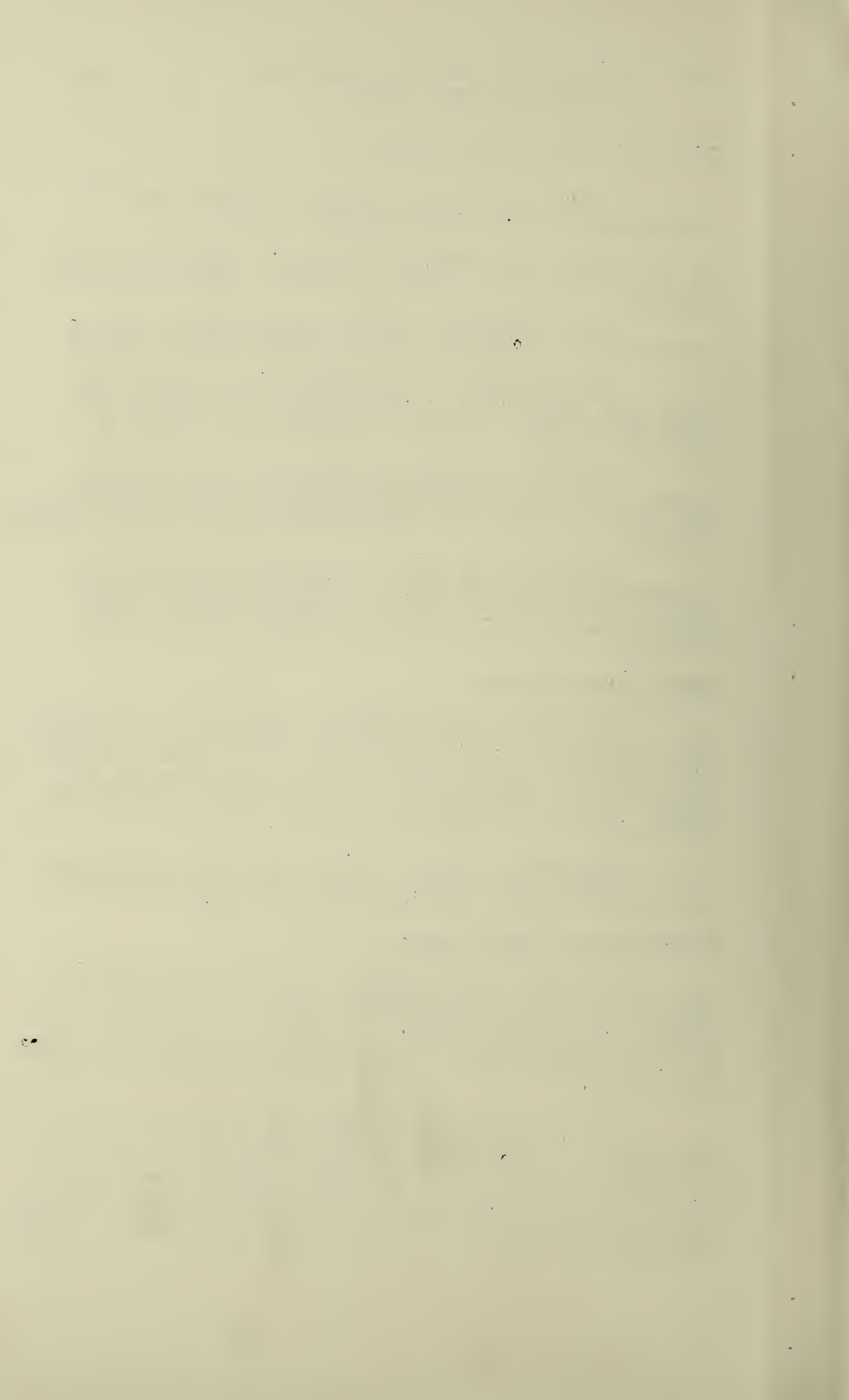
The Public Health Service is fundamentally concerned with the control of epidemic disease, but it is also concerned with environmental conditions. It seeks to secure pure and wholesome food supplies, and to provide facilities for the preservation and maintenance of the health of the mother and child. It is also responsible for the welfare of the mentally and physically handicapped, and the aged.

The personal health services, with the environmental health services, have helped to make life longer, safer and less subject to much suffering of mind and body.

Vaccination and Immunisation.

The Wilts, County Council as Local Health Authority under the National Health Service, arranges the immunisation schemes for Diphtheria, Whooping Cough, Poliomyelitis and more recently B.C.G. immunisation. Vaccination against Smallpox is usually carried out by the Local General Practitioner unless mass vaccination has to be arranged, when the County Council Staff assist.

Compulsory powers for infant vaccination ceased with the coming into operation of the National Health Service Act, 1948 and were replaced by voluntary arrangements. The number of infants under the age of one year vaccinated is now below the safety margin and the public should be made aware that the danger of infection is still very real and should not be ignored. Statistics relating to vaccination will be found on page 11 of this report.



Immunisation against Diphtheria is still of prime importance; this procedure has contributed largely to the absence of any notified cases of Diphtheria during the year.

Immunisation against Whooping Cough is usually incorporated with immunisation against Diphtheria and is a useful means of either avoiding an attack or of limiting its extent.

Poliomyelitis inoculations have been given to children in Chippenham during 1956 without any complications. It is too early yet to assess the value of this immunisation, but there is every reason to believe that it will prove effective.

B.C.G. immunisation. During the preparation of this report, B.C.G. immunisation against Tuberculosis has been made available to thirteen year old school children in certain schools in North West Wiltshire. This is an important and valuable measure in the control of Tuberculosis.

Infant Mortality.

The striking improvement which has taken place in the infant mortality rate as a whole in recent years, has been due entirely to the saving of infant life after the first week, the premature mortality rate, i.e. still births and deaths under one week, have however shown little improvement since 1949. The causes of perinatal mortality have now been investigated, and it has been shown that early recognition of these conditions can effect a further saving in infant life.

Scarlet Fever.

Most cases notified are of a mild type, and are usually sporadic, appearing whenever the population generally is suffering from a mild outbreak of sore throats or colds. Nevertheless, certain types of haemolytic streptococcal infection may have a selective action on the kidneys and may cause serious illness in adults.

Measles.

It is impossible to control this disease due to its high infectiousness before the patient shows any sign of its presence. He may spread infection for several days before the characteristic rash is seen. It is fortunate that the fatality ratio, like that of Scarlet Fever, has been steadily falling.

Whooping Cough.

The infant is very vulnerable to Whooping Cough. It is hoped that the combination of Whooping Cough with Diphtheria immunisation will contribute towards limiting this disease or reducing the severity of the attack. The group in greatest need of protection is that under six months of age.

Dysentery.

This disease, most common amongst young children, is rapidly increasing throughout the Country. There is an apparent as well as a real increase, as facilities for the examination of specimens have improved, and therefore more cases are diagnosed on bacteriological grounds; the only way to establish a positive diagnosis. It is fortunate that the usual causative organism is responsible for only a mild form of the disease. The fact of its spread clearly indicates a general failure on the part of the population to wash hands after use of the toilet. This simple act is one of the most effective of all preventive measures.

Pre cooked meat dishes take a prominent place among the vehicles of infection. Sometimes noxious bacteria are not killed in the process of cooking and the time which elapses between the cooking of the meat and the consumption of the dish allows them to attain such numbers or to produce such a quantity of toxin as to be harmful. A common source of contamination is a septic condition of the skin or a symptomless infection of the nose.

Scrupulous cleanliness of hands and utensils, cooking at temperatures lethal to bacteria, the use of sound meat and the restriction of made up dishes all contribute to the prevention of food poisoning.

Tuberculosis.

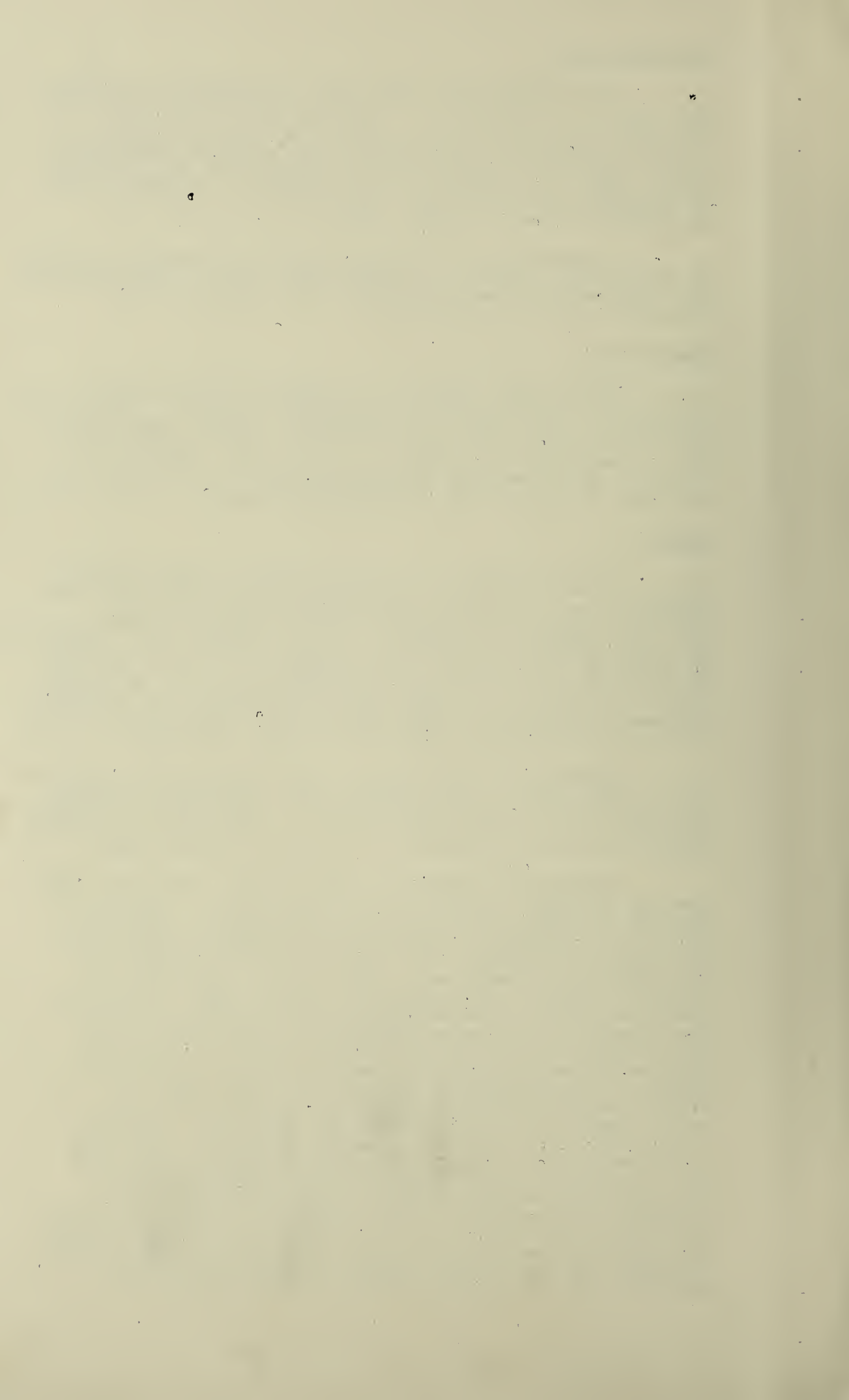
The present methods of treatment and prevention may eventually bring this disease under control. Tuberculosis is still the most important infectious disease, especially in the most productive years of life. Case finding is the key to prevention and efforts are necessary to trace the source of the disease in recognised cases and in those whose infection is revealed by the tuberculin test.

Cancer.

In his report for the year 1955, the Chief Medical Officer to the Ministry of Health states that "Civilized man appears to be increasingly surrounding himself with an unnatural chemical environment whose carcinogenic potentialities are being gradually explored. To what extent human cancer is caused by environmental carcinogens is not yet known but, as more and more of the chemical substances which man inhales, absorbs or ingests are being proved carcinogenic to animals, it seems reasonable to infer that certain cancers of the human body may be initiated or promoted by such substances".

Removal of a cancer in an early stage of development can be successful and the survival rate for treated cancers continues to increase, nevertheless the proportion of cancers found suitable for radical treatment is disappointingly small. There is no general solution as yet along curative lines.

Statistical studies in many countries have suggested that the incidence of cancer of certain sites is related to contain extraneous factors of great diversity. The most important at present is the association between Lung Cancer and Cigarette smoking. The problem cannot be ignored or its importance depreciated. The lives of those who will follow us must be considered and an effort made to halt the increasing annual death rate from this disease. In males aged 50-54 the lung cancer death rate is one half of the total cancer death rate and about one eighth of the total death rate from all causes in males. Many countries have carried out investigations and all are agreed that the relative risk of developing lung cancer rises in proportion to the amount of tobacco, especially cigarettes consumed. It has been stated that for a person smoking 40 cigarettes a day, the chance of lung cancer was 70 times greater than for a non-smoker, also that there was a higher mortality in smokers than in non-smokers; a higher mortality in cigarette smokers than in pipe smokers and a higher mortality in those who continue to smoke than in those who give it up. The risks involved should be made clear to all young persons in order that they do not commence a habit potentially dangerous, and so difficult to give up once formed.



It is generally accepted that the Child Welfare Services must pay increasing attention to the mental and emotional development of the child in an attempt to prevent or minimise the onset of mental illness. Treatment can be more effective or avoided altogether if the signs of physical or mental abnormality are noted and acted upon at an early age.

Blood Transfusion.

Statistics supplied by the National Blood Transfusion Service confirm that two public sessions, at which 219 donors attended, were held in the Borough during 1956. Although these results are excellent, the need for blood continues to increase. The public can be assured that giving of blood has no ill-effect on any normally healthy person.

Welfare of the Aged.

As far as possible every opportunity is taken to permit old people to remain in their own homes and efforts are made to enable them to carry on as long as possible in the surroundings to which they are accustomed. Many old people are quite unaware of the services now available to them.

The Chippenham Old Peoples' Welfare Committee continued to meet during the year.

Early in the year, following a report by the Medical Officer of Health, consideration was given to the possible extension of the Committee's work to include the rural area and neighbouring small towns. A special meeting was held in May; this was attended by representatives of the "Over 60" Clubs of Calne, Corsham and Malmesbury, who supplied valuable information of the excellent work which is being carried out by these clubs. It was decided to approach the County Welfare Committee and the latest position is that the result of a proper survey of the district to be undertaken by the County Welfare Officer is awaited.

During the year the Committee raised the question of the appearance of the land surrounding the old age pensioners' bungalows at Oaklands and Little Englands. In both cases (Council and the local Housing Association) the Committee was assured that steps were being taken to improve the appearance of the land in question.

The Committee was informed by the Medical Officer of Health that a number of elderly persons, particularly those living alone, were suffering severe hardship caused by a lack of suitable meals. An approach was made to the County Council in the hope that the school kitchen facilities already existing in Chippenham might be utilised to provide meals for the aged. The County, however, were not able to help in this way and accordingly a sub-committee was established to investigate the matter. As a result a "Good Neighbour" service has been started in a small way and four pensioners are being supplied with a hot meal twice weekly, the cost to the recipient being 1/- and to the Committee 1/6 per meal. It is hoped that this service will expand.

Considerable attention has been paid by the Committee to the question of Chiropody. An approach was made to Miss Tubbs with a view to Chiropody being provided for pensioners on a sessional basis. A successful experimental session was held on the 2nd. February and it is hoped that in the near future a proper scheme will be introduced to include all the old age pensioners in the town who require treatment, the cost to the patient to be 2/6d per treatment, the balance (approx. 15/- per session) being borne by the Committee.

Welfare of the Aged (Continued).

The Visiting Service continues to function and during the year the list of persons aged over 60 and living alone has been brought up to date and the visiting organisations supplied with additional names.

New Health Legislation, during 1956.

The Food & Drugs Act, 1955 and the Food Hygiene Regulations, 1955 came into operation on the 1st January, 1956. Under the latter, certain provisions involving alterations to premises or equipment or substantial changes in existing practices were deferred until the 1st July, 1956.

I am grateful to Mr. French, the Staff of the Council, and to Mr. Williamson, my Clerk, for their assistance in the preparation of this report and their co-operation during the year.

I am,

Your obedient Servant,

C.L. BROOMHEAD.

GENERAL STATISTICS.

Area (in acres)	1843
Population	15,300
Number of inhabited houses (end of 1956 according to the Rate Book) . . .	4,707
Rateable Value	£195,891
Sum represented by Penny Rate	£795

VITAL STATISTICS.LIVE BIRTHS

BIRTHS	MALE	FEMALE	TOTAL
Legitimate	107	100	207
Illegitimate	5	4	9
Total	112	104	216

Birth Rate for the Borough	14.1 per 1000 of the popula- tion.
Comparative Rate for England & Wales	15.7 per 1000 of the popula- tion.

The Birth Rate for 1956 is lower by comparison with the rate for 1955 which was 15.1 per 1000 of the population.

STILL BIRTHS

BIRTHS	MALE	FEMALE	TOTAL
Legitimate	1	1	2
Illegitimate	—	—	—
Total	1	1	2

Rate per 1000 total live and still births.. . . .	9.1
Comparative rate for England & Wales	23.0

INFANT MORTALITY

Deaths of Infants under one year:—

BIRTHS	MALE	FEMALE	TOTAL
Legitimate	3	1	4
Illegitimate	—	—	—
Total	3	1	4

Infant Mortality Rate:—

Deaths of infants under one year of age per 1000 live births
= 18.5

The three male infants shown in the above table died during the first four weeks of life.

Comparative rate for England & Wales 23.8

Deaths recorded in the Borough during 1956 were as follows:-

Males	Females	Total
116	130	246

Death Rate for the Borough 16.0 per 1000 of the population.
 Comparative Rate for England & Wales 11.7 per 1000 of the population.

The Death Rate for the Borough is higher this year by comparison with the rate for 1955 which was 14.0 per 1000 of the population.

ANALYSIS OF CAUSES OF DEATH.			
	Males	Females	Total
Tuberculosis, respiratory	-	-	-
Tuberculosis, other	-	-	-
Syphilitic disease	-	-	-
Diphtheria	-	-	-
Whooping Cough	-	-	-
Meningococcal infections	-	-	-
Ac. Poliomyelitis	-	-	-
Measles	-	-	-
Other infective and parasitic diseases	1	-	1
Malignant neoplasm, stomach	2	5	7
" " , Lung, Bronchus	13	2	15
" " , Breast	-	6	6
" " , Uterus	-	3	3
Other malignant and lymphatic neoplasms	3	7	10
Leukaemia, aleukaemia	-	1	1
Diabetes	-	3	3
Vascular lesions of nervous system	10	18	28
Coronary disease angina	23	13	36
Hypertension with heart disease	-	1	1
Other heart disease	16	24	40
Other circulatory disease	7	7	14
Influenza	2	7	9
Pneumonia	5	4	9
Bronchitis	6	1	7
Other diseases of respiratory system	2	2	4
Ulcer of stomach and duodenum	2	2	4
Gastritis, enteritis and diarrhoea	1	-	1
Nephritis and nephrosis	1	-	1
Hyperplasia of prostate	5	-	5
Pregnancy, childbirth abortion	-	-	-
Congenital malformations	-	-	-
Other defined and ill-defined diseases	13	19	32
Motor vehicle accidents	2	2	4
All other accidents	1	1	2
Suicide	1	2	3
Homicide and operations of war	-	-	-
TOTAL ALL CAUSES.	116	130	246

It will be seen from the above table, that Cancer, Heart Disease and Coronary disease collectively accounted for almost half the deaths in Chippenham Borough during 1956.

Deaths due to Cancer, particularly of the Lung or Bronchus are much greater than deaths from these causes during 1955.

It is however gratifying to note that not a single death was recorded during the year from the major communicable diseases.

PREVALENCE AND CONTROL OF INFECTIOUS DISEASE.

The following table shows the infectious diseases (other than tuberculosis) notified during 1956, together with comparative figures for previous years since 1950.

DISEASE.	1950		1951		1952		1953		1954		1955		1956	
	a	b	a	b	a	b	a	b	a	b	a	b	a	b
Scarlet Fever	17	17	26	25	14	14	19	19	11	11	13	13	13	12
Whooping Cough	22	22	47	47	2	2	48	48	7	7	28	28	9	9
Diphtheria	1	-	-	-	-	-	-	-	2	2	-	-	-	-
Measles	87	87	188	188	6	6	198	198	1	1	304	304	2	2
Ac. Poliomyelitis (Paralytic)	-	-	1	1	1	1	-	-	1	1	-	-	-	-
Ac. Poliomyelitis (Non-Paralytic)	-	-	8	2	-	-	2	-	1	-	-	-	-	-
Dysentery	-	-	1	1	2	2	-	-	-	-	-	-	1	1
Ophthalmia Neonatorum	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Pyrexia	1	1	1	1	29	29	31	31	21	21	20	20	25	25
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paratyphoid fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Food Poisoning	4	-	-	-	-	2	2	-	-	-	5	-	2	2
Erysipelas	1	1	3	3	2	2	1	1	1	1	1	1	4	4
Pneumonia	7	7	2	2	4	4	2	2	5	5	-	-	7	7
Cerebro-spinal fever.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS:-	141	136	277	270	60	60	303	301	50	49	371	366	63	62

"a" = Numbers originally notified.
"b" = Final numbers after correction.

Apart from a few sporadic cases of Scarlet Fever, the Borough was free of epidemic disease during 1956.

It is particularly gratifying that no cases of Infantile Paralysis or Diphtheria were notified during the year.

New cases of tuberculosis notified and confirmed by the County Chest Physician during the year are shown in the following table with comparative figures for previous years.

NEW CASES NOTIFIED DURING.

<u>YEAR</u>	<u>PULMONARY</u>	<u>NON-PULMONARY</u>	<u>TOTAL</u>
1948	12	1	13
1949	10	3	13
1950	6	2	8
1951	6	1	7
1952	10	3	13
1953	5	1	6
1954	7	1	8
1955	4	2	6
1956	5	2	7

NEW CASES AND MORTALITY
DURING 1956 ACCORDING TO AGE & SEX.

<u>AGE PERIODS.</u>	<u>NEW CASES</u>				<u>DEATHS</u>			
	<u>RESP.</u>		<u>NON-RESP.</u>		<u>RESP.</u>		<u>NON-RESP.</u>	
	<u>M.</u>	<u>F.</u>	<u>M.</u>	<u>F.</u>	<u>M.</u>	<u>F.</u>	<u>M.</u>	<u>F.</u>
0								
1								
5								
15		1		1				
25								
35	1			1				
45	1	1						
55								
65 upwards.		1						
TOTALS:--	2	3	-	2	-	-	-	-

It is gratifying to note that no deaths from Tuberculosis were recorded during the year.

The above table of new cases occurring during the year does not, of course, represent the total number of tuberculous patients living in the Borough. In addition to the new cases notified each year, a certain proportion of tuberculous individuals either move into the town or move out. According to the Register of Tuberculous Persons, the following notified and confirmed cases were resident in the Borough at the end of 1956.

	<u>Males</u>	<u>Females</u>	<u>Total</u>
Pulmonary	45	29	74
Non-Pulmonary	7	21	28
Total	52	50	102.

MASS RADIOGRAPHY.

It was once again possible to arrange for the Mobile X-Ray Unit to visit Chippenham during the year. During its stay from the 5th. May to the 1st June, a total of 5217 persons availed themselves of this service with the following results:--

Active Tuberculosis found	1
Inactive Tuberculosis	5
Conditions other than Tuberculosis	10

The National Assistance Act, 1948

Sec. 47. Removal to suitable premises of persons in need of care and attention.

It is a pleasure to record that it was not found necessary to affect a compulsory removal under the provisions of this Act. Wherever possible, every assistance is given to permit old people to remain in their own homes for as long as ever possible. In this respect, the County Welfare and Home Help Services have rendered valuable aid.

WHOOPING COUGH
DIPHTHERIA/IMMUNISATION.

The following children received primary immunisations during 1956.

<u>Under 1 year</u>	<u>Ages 1 - 4</u>	<u>Ages 5-14</u>	<u>Total</u>
265	132	5	402

Total immunised child population as at 31.12.56.

<u>Ages 0-4</u>	<u>Ages 5-14</u>	<u>Total</u>
764	2460	3224

VACCINATION.

The following children were vaccinated during 1956.

<u>Under 1 year</u>	<u>Ages 1-4</u>	<u>Ages 5-14</u>	<u>Over 15</u>
135	14	8	10

In addition to the above, the following were revaccinated during 1956.

<u>5-14</u>	<u>15 or over</u>
6	45

The regular routine samples of raw water taken from the bore holes showed some deterioration in bacteriological content during August, 1956. The treated water, however, with the exception of two samples, was reported by the Bacteriologist as satisfactory.

The frequency of sampling was increased and investigations made, in conjunction with Dr. Mann, Public Health Laboratory Service, and Mr. Phillips, the Borough Surveyor and Water Engineer to ascertain the extent and persistence of this unusual pollution. At the same time it was recommended that particular attention be given to the adequate chlorination of the supply.

The following report given to the Public Health Committee on the 22nd October, 1956 is relevant:-

"Since my report of the 20th September, 1956, a further series of samples of the raw and treated water from Boreholes 2, 3, 4 and 5 have been bacteriologically and chemically examined. The results of the bacteriological examinations to date are shown in Appendices "A" and "B".

Bacteriological Examination.

Prior to 31st July, 1956, the raw water showed no signs of pollution. Of the total samples examined since that date, scrutiny of Appendix "A" will indicate that 50% of samples from No. 4 Bore, 30% of samples from No. 3 Bore and 14% of samples from No. 5 Bore show pollution with faecal coli. Owing to the fact that No. 2 Bore has been out of use for the greater part of the period under review, insufficient samples are available to estimate a percentage pollution, nevertheless it will be seen that faecal coli have been present in three of the seven samples examined.

In Appendix "B" it should be noted that out of eighteen samples examined of the treated water, three have demonstrated faecal coli. Specimen results of samples taken in the Calne & Chippenham Rural District and supplied from the Chippenham sources are shown in Appendix "C".

The presence of faecal coli in both the raw and treated water is disturbing, having regard to their previous satisfactory bacteriological content. Faecal coli in a water are not always in themselves, harmful; their presence is indicative however of the possibility of pollution with pathogenic organisms, in other words they announce the advent of sewage pollution with consequent danger to health. Coliform bacilli are not necessarily of faecal origin, nevertheless their presence in a previous sterile water is also a warning signal of probable change in the character of the water supply.

The treated water in distribution to the public should contain no organisms; it should be sterile.

Chemical Examination.

A series of samples from the respective bores have been examined by Messrs. Waterfall and O'Brien, Bristol. These analyses were necessary for two reasons. To ascertain the stability of the raw water with regard to the organic content, since this has a bearing on Chlorination, and in the hope that useful data would be received concerning the nature of the pollution. These analyses must be correlated with the bacteriological findings and it does not follow that a water of satisfactory chemical organic quality is also free from dangerous bacteria and safe to drink.

The Analyst has reported that nothing striking has come to light except the high chloride and variable solids in the water from No. 4 Bore, and that none of the results so far obtained have given any indication of pollution. He also emphasises the fact that bacteriological tests are more sensitive. Sample analyses from the respective bores are shown in Appendix "D".

Source of Pollution.

In June, 1954, No. 3 Borehole was lowered from 150 feet to 201 feet. The installation of a larger pump has brought the bore into service once more with a larger yield. The Borough Surveyor's report of October, 1954 refers to a pump capacity of 150,000 - 200,000 gallons per hour and states that with a pump of this capacity it would be possible to raise all the water required for the undertaking in a working day of 12-16 hours. I am informed that the average total daily yield from all the bores is still within the region of two and a quarter million gallons per day. Although pollution was becoming evident before the installation of the new pump, the increased rate of extraction may be aggravating the problem.

Changes in the Catchment Area supplying the bores, probably taking place many miles away, plus the heavy rainfall of recent months are also potential causes of pollution.

An inspection of the Works with Mr. Phillips and Dr. Mann, in charge of the Public Health Laboratory, Bath, did not yield any evidence of local pollution.

At this stage, it will be evident that it is difficult to offer a firm opinion as to the cause of the pollution until further samples and investigations are made. It must be accepted in the meantime, that the water is liable to pollution, fortunately not great, yet nevertheless sufficiently alarming to warrant the most careful attention being given to adequate chlorination of the water at all times before distribution.

Chlorination.

In the destruction of pathogenic bacteria, chlorination accomplishes more in minutes than storage does in days. The dosage of chlorine required depends on several factors such as the organic content of the water requiring treatment, number of organisms present, and the length of time to which they are exposed to chlorine. If there is an excess of organic matter in the water, a proportion of the chlorine is deviated and therefore not available for sterilising purposes.

The determination and administration of the correct dose is important, for on it depends the safety of the supply and freedom of the water from odour and taste.

Adequate contact time of $\frac{1}{2}$ - 1 hour after chlorination should be given to the water before it reaches the consumer. If, owing to the arrangements at the water works and distribution system, this is not possible, then superchlorination and dechlorination of the water may be necessary.

Loss of chlorine is rapid when water is exposed to air, but is slow when confined in water mains.

Usually a dose of .2 parts per million of chlorine to a water of high organic purity, and an adequate contact period, are sufficient to sterilise the water without causing any taste. There should be a trace of chlorine left in the water in distribution.

RECOMMENDATIONS:-

1. Continued daily bacteriological examination of the raw water from the individual bores before chlorination.
2. Continued sampling of the water in supply within the Borough for bacteriological investigation. The present sampling procedure should be increased from once weekly to twice weekly.
3. Sampling per se will not safeguard the water supply, and it is recommended that the present arrangements for chlorination be reviewed. An adequate dose of chlorine should be administered to leave a trace of free chlorine in the water in supply throughout the whole system at all times. Regular examinations of all the water in distribution within the Borough, taken at representative points to ascertain the presence of free chlorine should be instituted by the Borough Surveyor as a routine measure. Recent routine samples of the Borough Water supply circulating within the Calne & Chippenham Rural District have failed to reveal any free chlorine. I understand that it is now possible to install an instrument to act as a recorder of the residual chlorine in the water leaving the works. This apparatus also incorporates a device which gives a warning should the residual chlorine deviate from a previously determined standard. The advice of a reputable firm specialising in the installation of chlorinating apparatus should be sought with this in view.
4. The other authorities, Civil and Service, should be informed of the position so that they may exercise the increased supervision necessary."

The following are representative chemical analyses of the raw borehole water:-

		<u>Parts per million.</u>			
		<u>Bores.</u>			
	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
Free & Saline	Less than .01	.02	.04	.01	
Ammonia.					
Albuminoid Ammonia	.02	.03	.04	.03	
Chlorine	44.0	47.5	125	44.0	
Oxygen	0.31	.35	0.42		
Nitrite	V.S.R.	V.S.R.	V.S.R.	V.S.R.	
Nitrate	Less than 0.20	0.7	0.8	0.8	
Total Solids	490	475	640	440	
Loss on ignition	35	40	20	20	
Appearance on ignition	S.D.	S.D.	S.D.	S.D.	

V.S.R. = Very slight reaction.

S.D. = Slight darkening.

I am indebted to Mr. Phillips for the following statistical information:-

The Council's Water Undertaking extracted 931 million gallons from boreholes at Westmead and Ivyfields during the year, equal to an average of 2,545,000 gallons per day.

The distribution of this water may be allocated approximately as follows:-

Average daily supplies in 15
thousand of gallons.

Bulk supplies to the Calne & Chippenham R.D.C.	850
Bulk supplies to Bradford & Melksham R.D.C.	80
Bulk supplies to Trowbridge & Melksham Water Board	175
Bulk supplies to Government Establishments in Hawthorn	200
Local Industrial supplies	540
Chippenham area of supply	<u>700</u> 2,545.

Samples of raw water from each of the sources in use have been examined much more frequently than hitherto as the Analysts reports of samples taken during August, September, and October 1956 were not considered satisfactory.

Chlorination has been steadily increased until a measurable chlorine residual in the distribution mains has been obtained.

Samples of raw water are being taken daily to maintain a close supervision of the bacteriological quality of the raw water. The yield from the Council's sources has not deteriorated during the year. The water is not pumbo-solvent.

Future schemes.

At the time of writing (August 1957) the demand has increased sufficiently to recommend the Council to proceed with the next stages of the development referred to in last year's report. The scheme of these works is being submitted to the Council.

Refuse Collection.

Refuse collection in the Borough continues to be carried out by two covered vehicles. The collection of house and trade refuse is carried out weekly and additional collections are made from premises such as cafes, food shops etc., where food is being handled. This work is under continuous review to re-route collection to deal with new houses erected in the Borough.

Refuse is disposed of by controlled tipping at two sites, namely, The Cuttings, Bath Road and the disused River Channel at Westmead. The latter site is used for summer tipping and the former during the winter months. At both tips the handling and covering of refuse is done mechanically and is proving satisfactory.

Full use is made of insecticides in refuse collection and as tip dressing and the eradication of rats is frequently done under the supervision of the Senior Public Health Inspector.

Sewerage and Sewage Disposal.

The Clerk of the Bristol Avon River Board has reported that the biochemical oxygen demand of the River Avon deteriorates appreciably below the Westmead Sewage Disposal Works. Preparation of the scheme for the extensions necessary at the Council's Sewage Disposal Works, are being delayed by changes and shortages of Engineering staff. In the meantime everything possible is

being done with the present plant to avoid excessive pollution of the River Avon.

The soil and surface water sewers of the Borough have been extended to provide drainage facilities for new properties, the more important of which are new housing scheme at Bristol Road and the new Secondary Modern School at Hardenhuish.

The Council continue to pursue the policy of obtaining separate drainage for soil and surface water.

FOOD HYGIENE.

The attention of the Council is directed particularly to the report of the Senior Public Health Inspector on the inspection of food premises, with emphasis on the need for the man in the street and the housewife to practice the same high standards of personal hygiene demanded from those handling food in shops and restaurants.

R E P O R T
of the
P U B L I C H E A L T H I N S P E C T O R

To:- The Mayor, Aldermen and Members
of the Chippenham Town Council.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present a Report of the work
carried out in my Department during the year 1956.

The tables and particulars conform to the Ministry's
Regulations and requirements.

I am,

Your obedient Servant,

S. F. FRENCH,

Senior Public Health Inspector.

652 Inspections were made of 252 premises in connection with Housing and Nuisances, and as a result, 123 notices were served requiring the abatement of nuisances and housing repairs. 3 Statutory Notices were served and complied with.

A disturbing feature is not the high number of complaints, but the increasing number of visits needed to get matters remedied. Much time is spent in interviewing owners and contractors in an endeavour to get works completed.

HOUSING STATISTICS FOR 1956.

1. Number of New Houses and Flats erected during the year.

(a) By Local Authority	-	61
(b) By Private Enterprise	-	59

2. Inspection of Dwellings during the year.

(i) Inspected for housing defects under P.H. Acts.	24
(ii) " " " " " Housing "	160
(iii) Number of dwellings found so dangerous or injurious to health as to be unfit for habitation	25
(iv) Number of dwellings found not to be in all respects reasonably fit for habitation	83

3. Remedy of Defects by Informal Action.

Number of dwellings rendered fit in consequence of Informal Action	53
--	----

4. Action under Statutory Powers (Public Health & Housing Acts)

A. Proceedings under Section 9, 10 & 16 of Housing Act 1936.

(i) Number of dwellings in respect of which notices were served requiring defects to be remedied	NONE
(ii) Number of dwellings rendered fit after service of formal notices	
(a) By Owners	NONE
(b) By Local Authority in default of owners	NONE

B. Proceedings under Public Health Acts.

(i) Number of dwellings in respect of which formal notices were served	3
(ii) Number of dwellings rendered fit after service of formal notices	
(a) By Owners	3
(b) By Local Authority in default of owners	NONE

C. Proceedings under Section 11 & 13 Housing Act 1936.

(i) Number of Demolition Orders made	17
(ii) Number of houses demolished as result of Demolition Orders	16
(iii) Number of undertakings accepted	5
(iv) Number of undertakings completed	4
(v) Number of Closing Orders made	3

D. Proceedings under Section 25 & 26 Housing Act 1936.

(i) Number of houses under which Demolition Orders were made	NONE
(ii) Number of houses demolished in pursuance of Demolition Orders	NONE

E. Proceedings under Section 12 Housing Act 1936.

(i) Number of separate tenements or underground rooms in respect of which closing orders were made	NONE
(ii) Number of separate tenements or underground rooms in respect of which closing orders were cancelled as result of premises having been made fit	NONE

5. Housing Act, 1936 Part IV - Overcrowding.

We are fortunate in this area in that overcrowding does not cause us serious concern. Our records show no case of overcrowding in non-Council houses.

Three applications only were received under the Housing Repairs and Rents Act 1954 for Certificates of Disrepair, which were granted and subsequently revoked when the houses were put into good repair.

The scheme has not been very successful and amending legislation is anticipated.

MOVEABLE DWELLINGS.

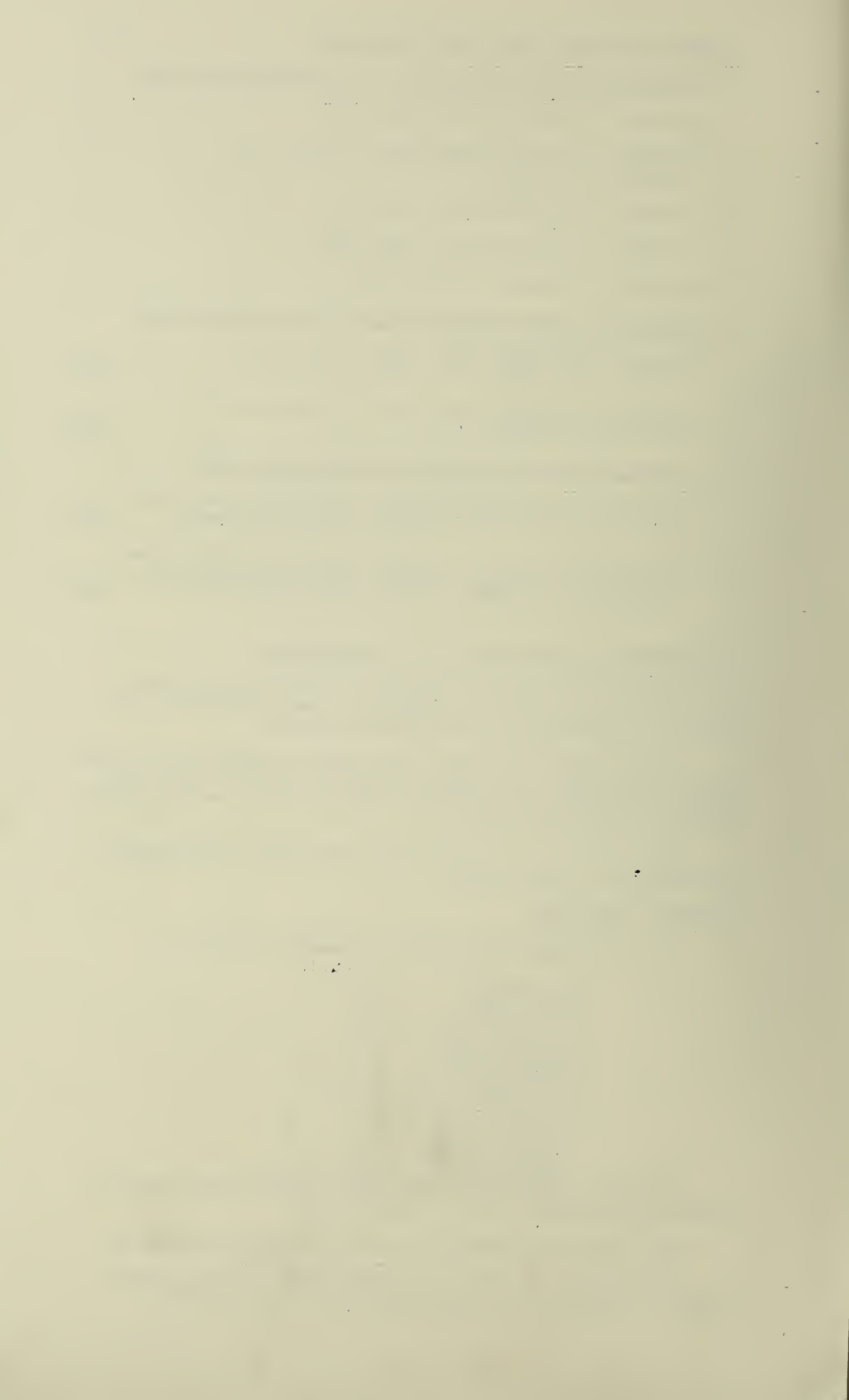
The following sites were used during the year :-

Foghamshire	3
Bath Road	2
Saltersford	3
Burlands Road	1
Derriads Lane	3
Patterdown	1
Hardenhuish Lane	1
Sheldon Road	1
Council's Sites:	
Greenway Lane	4
Bath Road	8

Frequent inspections are made of these sites, which, generally speaking, are well maintained.

All the above caravans are used as dwelling-houses.

The problem of the use of unsuitable sites in this area is a small one in comparison with other places.



1. INSPECTIONS for purposes of provisions as to health
(including inspections made by Public Health Inspectors).

	<u>Number on Register</u>	<u>Number of</u>		
		<u>Inspns.</u>	<u>Written Notices</u>	<u>Occupiers Prosecuted</u>
<u>PREMISES</u>				
1. Factories in which Secs.1,2,3,4 and 6 are to be enforced by Local Authorities	24	-	-	-
2. Factories not incl- uded in (1) in which Sec.7.is enforced by the Local Authority.	67	17	8	-
3. Other Premises in which Sec.7.is enforced by the Local Authority (excluding Out- Workers' premises)	-	-	-	-
TOTAL:	91	17	8	-

2. CASES IN WHICH DEFECTS WERE FOUND.

Number of cases in which defects were found

<u>Particulars.</u>	<u>Found</u>	<u>Remedied</u>	<u>To HM</u>		<u>Prosecutions</u>
			<u>Inspr.</u>	<u>By HM Inspr.</u>	
Want of Cleanliness (S1)	8	8	-	-	-
Overcrowding (S2)	-	-	-	-	-
Unreasonable Temp. (S3)	-	-	-	-	-
Inadequate Vent(S4)	-	-	-	-	-
Ineffective drainage of floors (S6)	-	-	-	-	-
Sanitary Convenience (S7)	-	-	-	-	-
(a) Insufficient	-	-	-	-	-
(b) Unsuitable or defective	-	-	-	-	-
(c) Not separate for sexes	-	-	-	-	-
Other offences against the Act(not including offences relating to Outwork)	-	-	-	-	-
TOTAL :	8	8	-	-	-

Informal action was taken regarding the emission of²¹
smoke and/or grit from the chimney of one factory. 18
observations were recorded.

Successful informal action was also taken in connection
with the emission of oil smuts from the stack of an oil-firing
plant.

DISINFECTION.

Disinfection was carried out in 8 homes and one hospital
(6 occasions) after infectious diseases. Bedding and similar
articles are treated by steam or destroyed when this is
considered necessary. No charge is made for fumigation or
steam disinfection when this is done because of infectious
disease.

ERADICATION OF VERMIN.

Some cases of verminous infestations were dealt with
by the use of D.D.T. and Gammexane Insecticides.

RODENT CONTROL

The methods used have, on the whole, become standardised
throughout the country, and are as recommended by the
Ministry of Agriculture and Fisheries.

Poisons used are Zinc Phosphide, Arsenious Oxide,
Warfarin, A.N.T.U.; and Red Squill.

The sewers, brocks and sewage outfall works are now
treated as a routine measure twice yearly, the refuse tip is
closely watched and treated as often as may be necessary.

The following details are in the form required by the Ministry of Agriculture and Fisheries.

	<u>Type of Property</u>				
	<u>Non-Agricultural</u>				<u>Agric- ultural</u>
	<u>Local Authy.</u>	<u>Dwelling Houses (inc. Cncl. Houses.)</u>	<u>All Other (inc. Business Premises)</u>	<u>Total of Cols. 1 2 & 3.</u>	
1. Number of properties in L.A.'s Dist. (Notes 1 and 2)	14	4688	607	5309	4
2. Number of properties inspected as a result of:-					
(a) Notification	6	36	20	62	-
(b) Survey under the Act	5	-	7	12	-
(c) Otherwise	-	163	49	212	-
3. Total inspections carried out-incl. re-inspections	46	248	125	419	-
4. Number of properties inspected (in Sec. 2) which were found to be infested by:					
(a) Rats (Major.	-	-	-	-	-
(Minor.	11	27	15	53	-
(b) Mice (Major.	-	-	-	-	-
(Minor.	-	6	6	12	-
5. Number of infested properties (in Sec. 4) treated by the L.A.	11	30	19	60	-
6. Total Treatments carried out incl. re-treatments	22	22	19	63	-

INSPECTION AND SUPERVISION OF FOODMEAT INSPECTION.

Both Bacon Factories continued to maintain the heavy slaughtering of the last few years. The Wiltshire Bacon Company, during the year, slaughtered some 55,534 pigs on their premises. Messrs. Spear Bros. & Clark killed 6,427.

A system of detention is operated at the bacon factory slaughterhouses. Factory operatives examine the pigs during the course of slaughter, incising the head and offal glands. Animals which show any disease or abnormalities in carcase or organs are detained and brought to the attention of the meat inspector while he is engaged on routine meat inspection. This system of detention is the best that can be adopted under the circumstances, obviates a full-time meat inspector and is working well in practice.

The arrangements made in the previous year with the Chippenham Butchers' Association for the use of two slaughterhouses continued during 1956. It will be remembered the Council took over the leases and let the premises to the local butchers.

Although the slaughterhouses are old and badly designed for the purpose, the standard of hygiene maintained was very good and the animals were killed in a humane manner.

One hundred per cent meat inspection was carried out.

The vehicles used for the transport of meat in this area have been maintained in fair condition.

	<u>Cattle,</u> <u>exclg.cows.</u>	<u>Cows</u>	<u>Calves</u>	<u>Sheep</u> <u>Lambs</u>	<u>Pigs.</u>
No.killed (if known)	708	10	238	2096	62722
Number inspected	708	10	238	2096	62722
<u>All diseases except</u> <u>Tuberculosis &</u> <u>Cysticerci.</u>					
Whole carcasses condemned	-	-	4	-	62
Carcasses of which some part or organ was condemned.	85	-	2	39	2773
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	12%	-	2.5%	1.8%	4.5%
<u>Tuberculosis only:</u>					
Whole carcasses condemned	2	-	-	-	30
Carcasses of which some part or organ was condemned	45	-	-	-	2005
Percentage of the number inspected affected with tuberculosis	6.6%	-	-	-	3.2%
<u>Cysticercosis</u>					
Carcasses of which some part or organ was condemned	7	-	-	-	-
Carcasses submitted to treatment by refrigeration	7	-	-	-	-
Generalised and totally condemned	-	-	-	-	-

MEAT CONDEMNED (HOME KILLED) DURING 1956.

25

<u>BOVINE</u>	T.	C.	Q.	Lbs.
2 Carcases		15	-	14
6 Forequarters		6	1	22
28 Heads		8	-	-
68 Livers, plus 36 Pt.Livers		8	2	19
29 Plucks		3	3	11
9 Skirts				14
Meat		1	3	11
Other Offal		1	2	12

PIGS

92 Carcases	6	3	2	8
865 Heads	5	13	3	0
Meat	2	14	-	7
Other Offal	19	3	3	11

SHEEP

Offal			2	25
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CALVES

4 Carcases		1	1	10
1 Head				4
Meat				3

TOTAL : 36 Tons 3 Cwts. 0 Qrs. 3 Lbs.

CYSTICERCUS BOVIS.

Routine examination of beef carcasses and organs is carried out to detect the parasite of *Cysticercus Bovis* as required by the Ministry of Food. *Cysticercus Bovis* is the cystic stage of *taenia saginata*, the tapeworm of man. During the year 7 cases were found, the cysts being located in the head in 4 cases and in the heart in 3 cases. Where infestation is localised, the part of the carcass or the organ affected is rejected as unfit for human consumption; the remainder of the carcass is placed in cold storage at a temperature not exceeding 20°F for a period of three weeks, and then released for human consumption. Failing refrigeration, the entire carcass and offal is rejected.

Method of disposal of condemned food.

All carcasses and offals found at the Bacon Factories and Slaughterhouses to be unfit for human consumption are mutilated and dyed prior to disposal for processing. Other foodstuffs are collected and disposed of on Council's Refuse Tip.

MISCELLANEOUS GOODS.

74 lbs tinned luncheon meat	174 tins fruit
20 lbs tinned veal	266 tins vegetables
45 lbs corned beef	63 tins milk
98 lbs beef	15 tins fish
67 tins various meats	2 pkts.cheese spread
77 jars meat paste	19 tins soup
9 tins jam	18 lbs sugared almonds

FOOD PREMISES

545 inspections were made of premises preparing and retailing foodstuffs.

Generally, food traders were coping with the new regulations satisfactorily. The question of provision of basins and sinks has caused difficulty, but not, I think, as much as many inspectors had expected. Advice and help given before the Regulations came into force achieved many improvements.

One of the main difficulties is that of dealing with the small dwelling house and shop. In these premises general commodities and food are sold and the accommodation is so restricted and crowded that the installation of sinks and wash-basins cannot readily take place.

During the year 45 notices were served under the Food Hygiene Regulations 1955, in respect of the following matters:-

Wash-hand basins, with hot and cold water.	38
Sinks, with hot and cold water.	11
Hot water apparatus.	9
Locker accommodation for outdoor clothing.	7
Unsuitable food storage accommodation.	7
Defective walls, floors, ceilings and woodwork.	46
Impervious surfaces to counters and tables	31
First Aid Kits, provision of	38
Dirty equipment	11
Refuse Bins, provision of	6
Vehicles	4

At the close of the year, some of these items were, naturally, still outstanding, but practically all had been completed at the time of the preparation of this report.

One foodshop, being run by an ageing spinster with no staff, was found to be in a very unhygienic condition, and, as a result of informal representations made to her advisers, she was persuaded to close the shop forthwith.

Food hygiene is very largely a matter of safe, clean food. There is a need for the man in the street and the housewife to practise the same high standards of personal hygiene that they expect from those handling food in shops and restaurants. The health of the family may very well depend upon the methods adopted in the home.

Constant supervision is exercised over the stalls retailing foodstuffs in the weekly market.

Number of food premises, by type of business:

General Grocery etc.	43
Butchers	18
Hotels, Cafes, Restaurants	13
Licensed Premises	29
Bakers, Confectioners	9
Sweets	7
Fish Fryers	5
Fishmongers	4
Fruit and Vegetables	8
Dairies	7
Bacon Factories	2

Number of food premises, by type, registered under Section 16 of the Food and Drugs Act 1955:

Preparation or manufacture of sausages, potted, pressed, pickled or preserved food.	20
Manufacture and sale of Ice-cream (only one manufactured during the year)	4
Sale of ice-cream	45

MILK AND DAIRIES

Number of registered dairies	8	7
Number of Registered Distributors	8	
Number of Registered Distributors with premises outside the Borough	2	10
Number of "T.T."Dealers' Licences		7
Number of "T.T."Supplementary Dealers' Licences		2
Number of Pasteurised Dealers' Licences		5
Number of Pasteurisation Plants		2
Number of "T.T.".samples examined(Methylene Blue)		123
Number of Biological samples examined		17
Number of inspections made during the year		92

Of the 123 samples of T.T.milks taken, 17 failed the standard required by the Milk(Special Designation)(Raw Milk) Regulations, 1949/50. Failures were notified to the County Milk Regulations Officer in order that investigations could be made on the producers' premises by the Milk Production Advisory Officers. Of the 38 samples taken for biological tests, no positive results were revealed.

As a check on the efficiency of milk bottle cleansing 13 sets were submitted for bacteriological examination. One of these was found to be unsatisfactory which necessitated follow-up procedure, with an improvement in results.

Some difficulty is experienced at the bottle washing plants due to the filthy condition of so many bottles when returned. Householders are advised to rinse milk bottles directly they are emptied, not to use them for other purposes, and to return them to the distributors promptly.

The Borough was included in a Specified Areas Order on the 6th December 1955. All milk now sold by retail must be "specially designated" milk (that is, pasteurised, sterilised, or tuberculin tested milk).

ICE-CREAM.

Number of premises registered for the manufacture and sale (only one manufactured during the year)	4
Number of premises registered for sale only	45
Premises from which ice-cream is sold but exempt from registration	3
Inspection of premises	118
Number of samples	79

Of the 79 samples taken, 75 were placed in Grades 1 and 2.

The Ministry advise that "if ice-cream consistently fails to reach grades 1 and 2, it would be reasonable to regard this as indicating defects of manufacture or of handling, which call for further investigation." Of the four which failed to reach these grades, three were manufactured at one premises within the Borough. This particular manufacturer welcomed the assistance we were able to give him in locating the faults in his methods and plant.

